



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: : Date: December 24, 2002  
KUO et al. :  
Serial No.: 09/684,576 : Group Art Unit: 2827  
Filed: October 6, 2000 : Examiner: Luan C. Thai

For: ELECTRONIC COMPONENT AND METHOD OF MANUFACTURE

**RESPONSE TO OFFICE ACTION**

Box AMENDMENT FEE  
Commissioner for Patents  
Washington, D.C. 20231

RECEIVED  
JAN - 2 2003  
TECHNOLOGY CENTER 2800

Sir:

This is in response to the Office Action mailed July 25, 2002 relating to the above-identified patent application. Please reconsider the present patent application in view of the remarks presented hereinafter, which are submitted as a full and complete response to the aforementioned Office Action.

Claims 1-4, 6-11, 15-19, 21, and 23-25 remain in the subject patent application.

## REMARKS

### **I. Formalities**

No amendments are made herein. Accordingly, Applicants respectfully submit that no new matter is added herein.

### **II. Remarks Directed to the 35 U.S.C. §112 Rejections**

The Office Action rejected claims 4 and 18 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed in view of the remarks made hereinbelow.

With respect to claim 4, the Office Action stated that it is unclear how the adhesive material, which forms a seal between the cap and the substrate, can electrically couple together the first and third bond pads. In this regard, the Examiner's attention is respectfully directed to FIGs. 11-14 and to the related text found at page 14, lines 3-24 of the pending application, where it is shown and stated that "a single or unitary piece of material [may be used] for the electrically conductive material and the adhesive material of components 701 and 702 in FIGs. 8 through 10," i.e., between caps 731 and 732 and substrate 210. For example, the single piece of material may be an organic Anisotropic Conductive Film (ACF) material. (See page 14, lines 15-16). Accordingly, as stated in claim 4, the adhesive material may both form a seal between the cap and the substrate and electrically couple together the first and third bond pads. It is thus respectfully submitted that Applicant's specification, as originally filed, does indeed disclose that the adhesive material is located between the cap and the substrate to form a seal and to electrically connect the first and third bond pads, notwithstanding the statement to the contrary made in the rejection of Claim 4.

With respect to claim 18, the Office Action stated that it is unclear how the electrically conductive material, which electrically connects the electrically conductive flip-chip bond pad

and the second electrically conductive bond pad, can seal the device between the cap and the substrate. For reasons similar to those stated above with respect to claim 4, the electrically conductive material may both electrically couple together the electrically conductive flip-chip bond pad and the second electrically conductive bond pad and form a seal between the cap and the substrate. It is thus respectfully submitted that Applicant's specification, as originally filed, does indeed disclose that the electrically conductive material is located between the cap and the substrate to form a seal and to electrically connect the electrically conductive flip-chip bond pad and the second electrically conductive bond pad, notwithstanding the statement to the contrary made in the rejection of Claim 18.

In view of the above remarks, it is respectfully requested that the 35 U.S.C. §112 rejections of claims 4 and 18 be withdrawn.

**III. Remarks Directed to the 35 U.S.C. § 102 Rejections**

**A. Remarks Directed to Claims 1-4, 6-11, and 15**

Claims 1-4, 6-11, and 15 were rejected under 35 U.S.C. §102(e) as being allegedly anticipated by United States Patent No. 6,373,130 to Salaville (hereinafter "Salaville"). A timeline shown in Exhibit A establishes that invention of the subject matter of the rejected claims occurred prior to the effective date of the Salaville reference. More specifically, the invention was conceived at least as early as February 17, 2000, and the effective date of the Salaville reference is March 30, 2000. Accordingly, it is respectfully requested that the 35 U.S.C. §102 rejection in view of Salaville for claims 1-4, 6-11, and 15 be withdrawn. The timeline is supported by affidavits and other documents, which are submitted herewith in accordance with 37 C.F.R. §1.131. The affidavits and other documents, taken together, prove that: (a) conception of the invention occurred prior to the effective date of the Salaville reference; and (b) the inventors, the assignee, and the assignee's attorneys acted diligently from prior to the effective date of the Salaville reference to the filing of the subject application.

**B. Remarks Directed to Claims 1-2, 7-8, and 15**

Claims 1-2, 7-8, and 15 were rejected under 35 U.S.C. §102(e) as being allegedly anticipated by United States Patent No. 6,214,644 to Glenn (hereinafter "Glenn"). A timeline shown in Exhibit A establishes that invention of the subject matter of the rejected claims occurred prior to the effective date of the Glenn reference. More specifically, the invention was conceived at least as early as February 17, 2000, and the effective date of the Glenn reference is June 30, 2000. Accordingly, it is respectfully requested that the 35 U.S.C. §102 rejection in view of Glenn for claims 1-2, 7-8, and 15 be withdrawn. The timeline is supported by affidavits and other documents, which are submitted herewith in accordance with 37 C.F.R. §1.131. The affidavits and other documents, taken together, prove that: (a) conception of the invention occurred prior to the effective date of the Glenn reference; and (b) the inventors, the assignee, and the assignee's attorneys acted diligently from prior to the effective date of the Glenn reference to the filing of the subject application.

In light of the foregoing remarks, Applicant respectfully submits that the 35 U.S.C. §102 rejections should be withdrawn. Applicant therefore respectfully requests that claims 1-4, 6-11, and 15 be allowed.

**IV. Remarks Directed to the 35 U.S.C. § 103 Rejections**

**A. Remarks Directed to Claim 16**

Claim 16 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Glenn. Because of the expected withdrawal of Glenn as a prior art reference in light of the 37 C.F.R. 1.131 affidavit mentioned hereinabove, it is respectfully submitted that the 35 U.S.C. § 103 rejection of claim 16 should be withdrawn.

**B. Remarks Directed to Claims 17-19, 21, and 23-24**

Claim 17-19, 21, and 23-24 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Salaville in view of United States Patent No. 5,880,403 to Czajkowski et al. (hereinafter "Czajkowski"). It is respectfully submitted that Czajkowski, considered alone, does

not make obvious the limitations of claims 17-19, 21, or 23-24. Therefore, and further because of the expected withdrawal of Salaville as a prior art reference in light of the 37 C.F.R. 1.131 affidavit mentioned hereinabove, it is respectfully submitted that the 35 U.S.C. §103 rejection of claims 17-19, 21, and 23-24 should be withdrawn.

**C. Remarks Directed to Claim 25**

Claim 25 was rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Salaville in view of Czajkowski and further in view of Glenn. It is respectfully submitted that Czajkowski, considered alone, does not make obvious the limitations of claim 25. Therefore, and further because of the expected withdrawal of Salaville and Glenn as prior art references in light of the 37 C.F.R. 1.131 affidavit mentioned hereinabove, it is respectfully submitted that the 35 U.S.C. §103 rejection of claim 25 should be withdrawn.

In light of the foregoing remarks, Applicant respectfully submits that the 35 U.S.C. §103 rejections should be withdrawn. Applicant therefore respectfully requests that claims 16-19, 21, and 23-25 be allowed.

### CONCLUSION

Applicant has made an earnest attempt to place this case in condition for allowance. In light of the remarks set forth hereinabove, Applicant respectfully requests reconsideration and allowance of all of the pending claims.

Although it is believed that the total fee required for this amendment has been submitted herewith, the Commissioner for Patents is hereby authorized to charge any fees that may be required, or credit any overpayment, to Account No. 02-4467.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicants invite Examiner Luan C. Thai to call the undersigned attorney at the Examiner's convenience.

Respectfully submitted,



Kenneth A. Nelson  
Attorney for Applicants pursuant to  
37 C.F.R. §1.34(a)  
Reg. No. 48,677  
Tel. (602) 364-7000

BRYAN CAVE LLP  
Two North Central Avenue  
Suite 2200  
Phoenix, AZ 85004-4406

CERTIFICATE OF EXPRESS MAILING UNDER 37 C.F.R. 1.10.

I hereby certify that this document (and any as referred to as being attached or enclosed) is being deposited with the United States Postal Service as "Express Mail Post Office to Addressee" service, mailing label No. **EL452289782US** on **December 24, 2002** and addressed to Box AMENDMENT FEE, Commissioner for Patents, Washington, D.C. 20231.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name: Thomas LeVance  
Printed Name: Thomas LeVance